

REMARKS

Claims 21 to 34 are pending. Claims 35 to 40 have been canceled. Reconsideration of the application is requested. Claims 21-34 are rejected under 35 USC § 103(a) as being unpatentable over WO 01/28741 (Beardsley). Applicant respectfully disagrees.

WO 01/28741 describes an abrasive article that is especially suited for use in critical or controlled environments such as clean rooms. The flexible abrasive article comprises a foraminous substrate, at least one binder, and abrasive particles, wherein the abrasive article contains a minimal amount of releasable physical and chemical contaminants. The abrasive article is capable of cleaning a workpiece surface in a clean room without damaging the surface and minimizes the release of particles and the transfer of ionic contaminants into the clean room environment. The '741 application discloses that the foraminous substrate may be an open, lofty, three-dimensional nonwoven fabric of fibers. Also, disclosed is that the "fibers used in the manufacture of the nonwoven web include both natural and synthetic fibers and mixtures thereof." (p. 5, line 7-8). However, the '741 application gives absolutely no specifics as to the amount and quantity of natural fibers that may be used to create the open, lofty, three dimensional nonwoven web.

The present application is concerned with open, lofty, three dimensional fibrous scouring materials that comprise a large portion of natural fibers. It was surprising that use of a large amount of natural fibers, greater than 50% by weight, could result in an open, lofty, three dimensional nonwoven having the claimed density.

Claim 21 has been amended to clarify that the nonwoven comprises greater the 50% weight natural fibers. In particular, independent claim 21 claims a scouring material comprising a three-dimensional non-woven web of entangled fibers bonded to one another at their mutual contact points by a pre-bond resin, wherein greater than 50% by weight of the fibers comprise natural fibers, and the bonded web has a maximum density of 50 kg/m³, and a plurality of abrasive particles adhered to the fibers of the bonded web by a make-coat resin.

The '741 application does not address at all the amount or quantity of natural fibers that may be used in the nonwoven. No particular importance is placed on the nature of the substrate of the abrasive article other than it is foraminous. The use of natural fibers is only mentioned in passing and is not preferred or exemplified. Synthetic fibers are preferred (page 5, line 8). Foam

materials and nonwovens formed from synthetic fibers (polyester) are presented in the examples. There is nothing in the '741 application to inspire a person of ordinary skill in the art who is attempting to reduce the environmental impact of discarding synthetic scouring materials to develop an open, lofty, three dimensional scouring material that has a large amount of natural fibers. It was surprising that use of greater than 50% of natural fibers could result in an open, lofty, three dimensional web and there is nothing in the '741 patent to suggest such a high amount of natural fiber content could result in an open, lofty nonwoven web. An abrasive article formed from a nonwoven substrate having a majority of natural fibers that is capable of degrading in an environmentally acceptable manner certainly is not contemplated or suggested by the '741 application.

There is clearly no explicit or implied disclosure in the '741 patent to teach or suggest to one of skill in the art to make an open, lofty, nonwoven web by using greater than 50% by weight natural fiber content. It is respectfully submitted that independent claim 21 is allowable over the cited reference. Claims 22-34 depend from claim 21 and are allowable for at least the same reason.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application is requested. Applicant welcomes a telephone interview to more fully understand the examiners position and advance this case to issuance.

Respectfully submitted,

10/29/2009

Date

By: /Trisha D. Adamson/

Trisha D. Adamson, Reg. No.: 55,860

Telephone No.: 651-736-9296

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833